

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named
Inventor : Eric R. Lovegren et al.

Appln. No. : 09/667,297

Filed : September 22, 2000

For : IMPROVED THRESHOLD SETTING
FOR A RADAR LEVEL
TRANSMITTER

Docket No.: R11.12-0701

Group Art Unit: 2857

Examiner: Kimberly
White

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
Washington, D.C. 20231

I HEREBY CERTIFY THAT THIS PAPER IS BEING
SENT BY U.S. MAIL, FIRST CLASS, TO THE
ASSISTANT COMMISSIONER FOR PATENTS,
WASHINGTON, D.C. 20231, THIS

11 DAY OF June, 2001.

PATENT ATTORNEY

Sir:

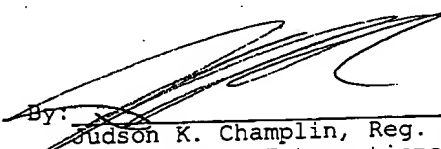
The patents or publications listed on the enclosed PTO Form-1449 are submitted pursuant to 37 C.F.R. § 1.97. Copies of the patents or publications cited are enclosed.

The information disclosure statement is being filed within the time periods set forth in 37 C.F.R. §1.97(b). Accordingly, no statement or fee is required.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123. A duplicate copy of this communication is enclosed.

Respectfully submitted,

WESTMAN, CHAMPLIN & KELLY, P.A.

By: 
Judson K. Champlin, Reg. No. 34,797
Suite 1600 - International Centre
900 Second Avenue South
Minneapolis, Minnesota 55402-3319
Phone: (612) 334-3222
Fax: (612) 334-3312

JKC/djb

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7 DAY OF Feb 2002

PATENT ATTORNEY

Sir:

The patents or publications listed on the enclosed PTO Form-1449 are submitted pursuant to 37 C.F.R. § 1.97. Copies of the patents or publications cited are enclosed.

Submitted herewith is a copy (with English translation as appropriate) of an Official Search Report of the European Patent Office in counterpart foreign application No. PCT/US 01/29467 filed September 20, 2001.

TIME OF FILING

The information disclosure statement is being filed:

1. x with the application or within three months of the filing date of the application or date of entry into the national stage of an international application or before the mailing date of a first Office action on the merits, whichever event occurs last. In accordance with 37 C.F.R. § 1.97(b), no statement or fee is required.
2. — after the time period specified in paragraph 1 above, but before the mailing date of a final action under 37 C.F.R. § 1.113 or notice of allowance under 37 C.F.R. § 1.311. Therefore, in accordance with 37 C.F.R. §

-2-

1.97(c), submitted herewith is:

(check either A or B below)

- A. ☐ a statement as specified in 37 C.F.R. § 1.97(e).
B. ☐ the fee set forth in 37 C.F.R. § 1.17(p) for submission of an information disclosure statement under 37 C.F.R. § 1.97(c).

3. ☐ after the mailing date of either a final action under 37 C.F.R. § 1.113 or a notice of allowance under 37 C.F.R. § 1.311, whichever occurs first, but before payment of the issue fee. Therefore, Applicant petitions for consideration and submits herewith:

- A. a statement as specified in 37 C.F.R. § 1.97(e);
B. the petition fee set forth in 37 C.F.R. § 1.17(i).

STATEMENT

(only used if No. 2(A) or No. 3 above is checked)

The person(s) signing below certify

(check appropriate paragraph)

- x that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement. 37 C.F.R. § 1.97(e)(1).

OR

- ☐ that no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this statement. 37 C.F.R. § 1.97(e)(2).

-3-

METHOD OF PAYMENT

☒ No fee is required.
☐ Attached is a check in the amount of \$_____.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123. A duplicate copy of this communication is enclosed.

Respectfully submitted,

WESTMAN, CHAMPLIN & KELLY, P.A.

By: 

Judson K. Champlin, Reg. No. 34,797
Suite 1600 - International Centre
900 Second Avenue South
Minneapolis, Minnesota 55402-3319
Phone: (612) 334-3222
Fax: (612) 334-3312

BDK/djb

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I HEREBY CERTIFY THAT THIS PAPER IS BEING
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12 DAY OF April 2001.

PATENT ATTORNEY

Sir:

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The information disclosure statement is being filed within the time periods set forth in 37 C.F.R. §1.97(b). Accordingly, no statement or fee is required.

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JKC/djb

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Sheet 1 of 2

FORM PTO-1449	Atty. Docket No.: R11.12-0701	Appl. No.: 09/667,297
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	First Named Inventor:	
	Eric R. Lovagren et al.	
	Filing Date September 22, 2000	Group Art.: 2857

U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
AA	3,812,422	05/74	Carollis	324	58.5	
AB	3,900,260	08/75	Wendt	356	5.12	
AC	3,995,212	11/20/76	Ross	324	58.5 B	
AD	4,044,355	8/77	Evardsson	342	124	
AE	4,435,709	3/84	Kipp	342	101	
AF	4,972,386	11/90	Lau	367	99	
AG	5,157,337	10/20/92	Noel et al.	324	632	
AH	5,365,178	11/94	Van Der Pol	324	644	

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AI	"Novel Methods of Measuring Impurity Levels in Liquid Tanks", IEEE MTT-S International Microwave Symposium Digest, US, New York, IEEE, pages 1651-1654 (1997)
AJ	"Micropower Impulse Radar Technology and Application", by Mast et al., U.S. Dept. of Energy, Lawrence Livermore National Laboratory, UCRL-ID 130474 (April 15, 1998).
AK	"Radar Level Technology Offers Accurate, Noncontact Measurements" by Fred Fitch, Special Report Flow, Level, Pressure, I&CS, pages 27-30 (January 1996).
AL	"Gauging and Level Measurement for Liquids, Interface and Granular Materials", Reflex-Radar, KROHNE, Technical Data BM 100, BM 100 EEX (12/96).
AM	"Low-Cost Wideband Spread-Spectrum Device Promises to Revolutionize Radar Proximity Sensors", Technology Advances, Electronic Design (July 25, 1994)
EXAMINER:	DATE CONSIDERED: 4/07/02

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

-3-

Sheet 2 of 2

FORM PTO-1449	Atty. Docket No.: R11.12-0701	Appl. No.: 09/667,297
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	Eric R. Lovegren et al.	
	Filing Date September 22, 2000	Group Art: 2857

U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
BA	5,440,310	8/95	Schreiner	342	124	
BB	5,656,774	08/97	Neison et al.	73	290	
BC	5,659,321	8/75	Burger et al.	342	124	
BD	5,726,578	03/98	Hook	324	643	
BE	5,734,346	3/98	Richardson et al.	342	124	
BF	6,130,637	10/00	Meszaros et al.	342	124	
BG	6,166,681	12/00	Meszaros et al.	342	124	
BH	6,184,818	2/01	Meinel	342	124	
BI	6,198,424	3/6/01	Diode et al.	342	22	

FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub Class	Translation Yes No
BJ	09069731A	3/11/97	JP	H03D	7/00	X
BK	697940A	3/11/97	SU	G01R	23/02	

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

BL	"Eclipse Guided Wave Radar", Magnetrol, printed from http://www.magnetrol.com/html/eclipse.htm (July 23, 1998).
BM	"Approval Standard Intrinsically Safe Apparatus and Associated Apparatus for use in Class I, II and III, Division 1 Hazardous (Classified) Locations", Factory Mutual Research, Class No. 3610, pages 1-70 (October 1988).
BN	"Measuring Fluid Levels with Radar", by Steven Ashlev, Mechanical Engineering, pages 82-83 (January 1996).
BO	"World's Fastest Solid-State Digitizer", Lawrence Livermore National Laboratory, Energy & Technology Review, pages S1-S6 (April 1994).

EXAMINER: Duplicate Eric R. Lovegren DATE CONSIDERED: 11/01/02

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 1 of 1

FORM PTO-1449	Atty. Docket No.: R11.12-0701	Appl. No.: 09/667,297
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U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
AA	5,969,686	10/19/99	Burger et al.	342	124	
AB						
AC						
AD						
AE						
AF						
AG						
AH						
AI						
AJ						
AK						

FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub Class	Translation Yes No
AL						
AM						
AN						

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AO	
AP	
AQ	

EXAMINER: *D. P. S. KATE*

DATE CONSIDERED: 11/07/03

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 1 of 2

FORM PTO-1449	Atty. Docket No.: R11.12-0701	Appl. No.: 09/667,297
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	First Named Inventor:	
	Eric R. Lovegren et al.	
	Filing Date	Group Art:
	September 22, 2000	2857

U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
AA						
AB						
AC						
AD						
AE						
AF						
AG						
AH						
AI						
AJ						
AK						

FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub Class	Translation Yes No
AL	EP 0 928 974 A2	7/14/99	EPO			X
AM	WO 97/06448	1/30/96	WO			X
AN						

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AO	
AP	
AQ	

EXAMINER: *DWISCATE* *My R W M* DATE CONSIDERED: 11/07/02

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.